Title (en)

METHOD FOR PREPARING ECHINOCANDIN DERIVATIVES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ECHINOCANDINDERIVATEN

Title (fr)

PROCEDE DE PREPARATION DE DERIVES D ECHINOCANDINE

Publication

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Application

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Abstract (en)

[origin: FR2833596A1] The invention concerns a method for preparing compounds of formula (I), wherein: R is such as defined in the description and their salts, their intermediates, the use of dihydrochloride as medicine and pharmaceutical compositions comprising same.
[origin: FR2833596A1] Preparation of echinocandin derivatives (I) comprises: (1) reacting an amine compound (II) with an acid; (2) alkylating the obtained amide compound (III); (3) dehydrating the obtained alkylated compound (IV) or (III), and (4) reductively aminating the obtained ketone compound (V) with ethylene diamine in the presence of a reducing agent. Preparation of echinocandin derivatives of formula (I) comprises: (1) reacting an amine compound of formula (II) with an acid of formula RCO2H (optionally activated or isolated); (2) alkylating the obtained amide compound of formula (III) with Alk-OH; (3) dehydrating the obtained alkylated compound (IV) or (III), and (4) reductively aminating the obtained ketone compound (V) with ethylene diamine in the presence of a reducing agent such as NABH3CN in the presence of a Lewis acid or NaBH(OCOR'3), to give (I) containing one of the optically active isomers as a major component and subjecting (I) to chromatography, crystallization, the action of a base and/or salification. . R = up to 30C cyclic, branched or straight chain optionally containing at least one heteroatom and at least one heterocyclyl; Q = 4-hydroxyphenyl; Alk = 1-4C alkyl, and OCOR' = Boc-L-Pro, Bzl-L-Pro or other optically active amino acid or optionally chiral carboxylic acid. An Independent claim is also included for 1-(4-((2-aminoethyl)amino)-N2-((4'-(octyloxy)(1,1'-biphenyl)-4-yl)carbonyl)-L-ornithine)-4-(4-(4-hydroxyphenyl)-L-threonine) -5-L-serine echinocandin B dihydrochloride (Ia) in 4S or 4R form or optically active isomer A.

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